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DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, D.C. 20350

IN REPLY REFER TO
OPNAVINST 2800.2
Op-941C12

2 JAN 1980

OPNAV INSTRUCTION 2800.2

From: Chief of Naval Operations

Subj: Naval Telecommunications System (NTS) operating requirements

Ref: (a) SECNAVINST 5400.13 of 24 Aug 71; Assignment and Distribution of Authority and Responsibility for the Administration of the Department of the Navy
(b) SECNAVINST 11120.1D of 19 Nov 68; Programming of Major Telecommunications Requirements
(c) SECNAVINST 4860.44B of 4 Apr 75; Commercial or Industrial Activities Programs

Encl: (1) Glossary
(2) Non-applicability
(3) Policy
(4) Requirements Process
(5) Identification and Submission of Future Naval Telecommunications Operating Requirements by the Requiring Activity
(6) Responsibilities and Identification of Submitting Authorities
(7) Implementation of Validated Telecommunications Operating Requirements

1. Purpose. This instruction provides policy and procedures for the identification, submission, validation and processing of operating requirements for telecommunications.

2. Cancellation. OPNAVINST 11120.5.

3. Definitions. Enclosure (1) contains a glossary of terms applicable to this instruction.

4. Scope and Applicability

a. Reference (a) assigns to the Chief of Naval Operations the responsibility for providing telecommunications services for Naval Forces.

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b. Reference (b) establishes policy and procedures governing the programming of major telecommunications requirements.

c. Reference (c) establishes policy and procedures for the management of commercial or industrial activities programs which includes telephone systems.

d. This instruction applies throughout the Department of the Navy with regard to the processing of telecommunications requirements in support of operating forces based ashore and shore activities. Exceptions to the procedures specified herein are identified in enclosure (2). Telecommunications requirements include those for all new or increased circuit capabilities, whether government furnished or leased.

e. The basic telecommunications requirement is the need to transfer information, which in turn is translated into specific circuit requirements. Unique equipment to satisfy such requirements may be identified; however, equipment selection is the responsibility of the implementing authorities. Available equipment will be identified where appropriate under enclosure (7) to provide information for determining efficient and economic equipment acquisitions.

5. Background

a. The increasing high costs of telecommunications support, especially leased services, have resulted in high visibility of communications programs at all levels of government. This fact underscores the need for management awareness and improved life cycle documentation of telecommunications resources.

b. Development and planning for a responsive naval telecommunications system requires early identification and consideration of user requirements so that requisite programming to obtain necessary resources can be accomplished. The recognition, definition and submission of telecommunications requirements two or more years in advance of desired operational dates will permit system planning and programming to acquire necessary resources.

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c. The intention of this instruction is to provide management assistance at all levels in identifying and obtaining the resources needed to satisfy telecommunications requirements.

6. Policy. The policy for processing telecommunications requirements is set forth in enclosure (3).

7. Responsibility and Authority

a. The Chief of Naval Operations (Op-941) will review, validate and approve major and below threshold telecommunications requirements for the Department of the Navy.

b. Submitting authorities, as identified in enclosure (6) are responsible for directing the implementation of this instruction, and will ensure that telecommunications requirements are identified during the appropriate programming and budgeting cycle.

c. The Commander, Naval Telecommunications Command will:

(1) Develop and promulgate Telecommunications Operating Requirements (TELCOR) documents for operating forces based ashore and shore activities.

(2) Analyze requirements and select the most cost-effective service and facilities, whether government owned or leased, for satisfying the requirement.

(3) Coordinate within the Department of the Navy, with other services, Department of Defense agencies, U.S. Government agencies, and industry, as required, to determine the most practical method of satisfying telecommunications requirements in accordance with existing policies.

(4) Validate minor telecommunications requirements, including changes to existing services and facilities.

(5) Plan, program and budget for the Naval Telecommunications System, (NTS) as assigned.

(6) Implement validated requirements, as assigned.

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(7) Conduct biennial reviews of dedicated networks and circuits.

(8) Act as the predominant Department of the Navy point of contact with Headquarters DCA and DCA field activities with respect to the Defense Communications System.

d. The Chief of Naval Materiel (Commander, Naval Facilities Engineering Command) will review, approve and contract for administrative telephone services and facilities below the thresholds of a "new start" as described in reference (c). Administrative telephone services and facilities while not a part of the NTS, require extensive interfaces with that system. Responsibilities include:

(1) Validating requirements and approving changes to existing telephone systems and ownership.

(2) Establishing standards and procedures for the management of administrative telephone service.

(3) Executing contracts for telephone systems and services in accordance with current Navy Procurement directives.

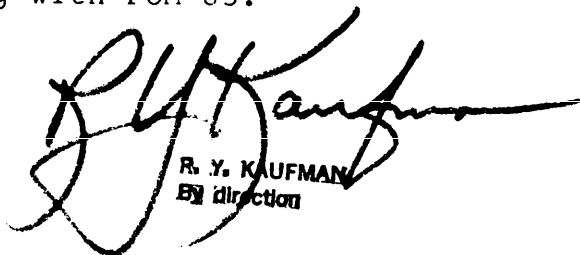
(4) Reviewing currently published standards and procedures, including technical requirements for interface with AUTOVON, for operation and maintenance of administrative telephone facilities and services and to promulgate changes as necessary to ensure maintenance of quality levels equivalent to good commercial practices.

e. Commands and activities at all levels are responsible for recognizing communications deficiencies and for identifying and submitting new and revised telecommunications requirements to satisfy current and planned operations. Establishment of a base telecommunications coordinating group at the local level is encouraged to identify requirements to assure mutual support, and inclusion of the results in the base master plan.

8. Procedures. The procedures for processing Naval Telecommunications operating requirements are set forth in enclosures (4) through (7).

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9. Action. Program adjustments resulting from this instruction will be made in subsequent Program Objective Memorandums (POMs), commencing with POM-83.



R. Y. KAUFMAN
BY direction

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GLOSSARY

- Access Line - A circuit connecting a subscriber to an automatic switching center.
- ADP - Automatic Data Processing.
- ADPE - Data Processors, associated input-output devices, and auxiliary equipment using electronic circuitry to perform arithmetical and logical operations automatically by means of internally stored programmed instructions.
- ADPS - ADPE linked together by communication and data transmission equipment to form an integrated system for the processing and conveyance of data.
- Administrative Telephone Facilities and Services - Administrative telephone facilities and services include:
- a. Automatic or Manual Systems providing a Shore (Field) Activity with common user, on-base telephone service connected to a commercial telephone system through trunk lines. The telephone facilities and services may be Government-owned and/or leased, including such items as instruments and associated apparatus, and outside cable plant.
 - b. Other local, on-base communications systems that may use portions of the local telephone system, such as public address systems, administrative intercom systems, fire reporting systems, and alarm systems.
 - c. Local, on-base telephone facilities that interconnect with AUTOVON (e.g., digit 8 level dialing).
 - d. Foreign exchange lines
 - e. Off-premise extensions

Enclosure (1)

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- f. Wide Area Telecommunications Service (WATS)
 - g. Teletypewriter Exchange Service (TWX) and International and Domestic Teleprinter Exchange Service (TELEX). - Commercial services permitting teletypewriter communications on the same basis as telephone service, operating through central switchboards to stations within the same city or in other cities.
- Approval - Concurrence that a stated requirement is recommended for validation and is acceptable for planning and implementation. Approval is implicit when a requirement is forwarded by a submitting authority.
- ARPANET - Advance Research Project Agency Network; unsecured, packet switched, telecommunications data network that provides computer-computer and computer-terminal service.
- ARS - Advanced Record System; data communications service provided by GSA.
- ASC - Automatic Switching Center.
- AUTODIN - Automatic Digital Network of the Defense Communications System (DCS) for record communications.
- AUTODIN I - Automatic Digital Network; the world-wide, high speed, common user, record communications system of the DCS which provides user-to-user store and forward message switching service for the DOD and other authorized government agencies.
- AUTODIN II - A common user digital communications network for CONUS and certain European and Pacific subscribers available in the post FY 80 time frame in support of Automated Data Processing (ADP) systems and networks. It will also provide the backbone trunking for AUTODIN I. AUTODIN II, a distributed communications net-

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work, uses packet-switching processors collocated with existing AUTODIN I switching centers. The system will accommodate interactive, query response, narrative and bulk data information exchange among ADP oriented facilities over a range of data rates with appropriate interface protocols.

AUTODIN I TERMINAL - the equipment which provides user entry into the automatic digital networks ranging from 100 wpm teleprinters to computerized multi-media terminals and interfaced computers.

AUTOSEVOCOM - Automatic Secure Voice Communications Network; the common-user DCS secure voice network, supported principally by AUTOVON for transmission.

AUTOVON - Automatic Voice Network; the principal long-haul, common-user DCS unsecure voice communications network.

Avoidance Routing - Circuits routed so as to avoid critical junctions and known target areas.

Below-Threshold Telecommunications Requirement - A need for new or increased capabilities costing less than the thresholds for major telecommunications requirements as specified in reference (b), but in excess of \$100,000 annually (whether government furnished, leased or a combination of both).

BESEP - Base Electronic System Engineering Plan. A BESEP translates the functional requirements of the Communications Operating Requirements (COR) into a statement of resource requirements, and it details the engineering plan for meeting the objectives of the project.

Circuit - An electronic path between two or more points.

Circuit Restoration - The process by which a communications circuit supplier provides a circuit path

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between two user stations after disruption or loss of the existing circuit path, in accordance with preplanned procedures and priorities.

Communications Security (COMSEC) Equipment Requirements - Statement of the need for COMSEC equipment by specific quantity and type for a designated purpose.

DCA - Defense Communications Agency.

DCS - Defense Communications System.

DECCO - Defense Commercial Communications Office.

Dedicated Circuit - A full period, permanent, interconnecting line between two or more users.

Diverse Routing - Two or more circuits furnished over different physical routes. End-to-end diverse routing provides for separate physical routes having no common points user-to-user.

Dual Access (AUTODIN) - A method by which a subscriber, having only one set of terminal equipment, is provided access to two different ASCs by separate lines only one of which may be used at a time.

Dual Homing (AUTODIN) - A method by which a subscriber, having two sets of terminal equipment, is provided access to two different ASCs by separate lines both of which are used continuously.

E&I - Engineering and Installation.

ECC - Electronic Courier Circuit.

FTS - Federal Telecommunications System. Intercity telephone service provided by GSA within the CONUS.

Future Telecommunications Operating Requirements (Future -"TELCOR") A file of validated telecommunica-

Enclosure (1)

tions operating requirements used as planning, programming and budgeting source data for the NTS.

FYDP - Five Year Defense Program.

GSA - General Services Administration.

Investment Cost - The initial cost for establishment and acquisition of a facility. It is computed to include the cost of military construction or site preparation, procurement, and installation of equipment.

Leased Line - A commercially provided circuit. Equipment or services also may be leased.

Major Telecommunications Requirement - A need for new or increased capabilities that are within the cost thresholds specified in reference (b).

Minor Telecommunications Requirements - A need for a new or increased telecommunications capability for which the initial cost is \$100,000 or less, annually, whether government-furnished, leased or a combination of both.

Navy Trunk and Circuit Directory - A data file of NTS trunks and circuits for which resources are available as listed in part two of the TELCOR documentation system.

New Start - Initial requirement for activation of an original government or leased circuit.

NTS - Naval Telecommunications System - (Defined in enclosure (2) to OPNAVINST 5450.184C).

O&M - Operations and Maintenance.

Permanent Circuit - One provided and used in peace time and which normally continues to be used in wartime.

Program Element Sponsor - The DCNO or Director of a Major Staff Office (DMSO) within OPNAV who is responsible for force composition, funding

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support, and programmed manpower for a specific program element.

RDT&E - Research, Development, Test and Evaluation.

Request for Service (RFS) - Message or letter (commonly referred as Feeder TSR) submitted in DCAC 310-130-1 format by the requiring activity to implement a validated and funded requirement in the case of new service, or to initiate implementation of routine actions not requiring prior validation.

Requiring Activity (R/A) - The O&M user that identifies and submits a telecommunications requirement to support mission, tasks and functions.

Split Homing (AUTOVON) - The connection of an AUTOVON terminal facility to more than one switching center by separate access lines, each having a separate number.

SPP - Subsystem Project Plan.

Submitting Authority (S/A) - A major claimant or designee authorized to compile and submit Naval telecommunications requirements.

TELCOR - Telecommunications Operating Requirement (described in NAVTELCOMINST 2800.1).

Telecommunications - Any transmission, emission or reception of signs, signals, writing, images, and sounds or information of any nature by wire, radio, visual or other electromagnetic systems.

Telecommunications Certifications Office (TCO) - The designated person or activity that certifies to DCA that a specified telecommunications service or facility is a bonafide requirement and is prepared to pay mutually acceptable costs involved in its fulfillment.

Telecommunications Operating Requirement (TELCOR) - An expressed need, explicitly related to a mission requirement, to transfer electrically

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a given volume of information between two or more locations, within a specific time period and of a given quality and security classification.

Telecommunications Service Request (TSR) - A pro-forma request submitted to DCA or a DCA activity for the implementation of certain requirements in the format of DCAC 310-130-1. Originated only by a specifically designated TCO.

Temporary Circuit - One required for a limited period of time to satisfy a special requirement.

Urgent Telecommunications Requirement - A request for service for which the required date is less than the normal 24 months lead time. The term "Urgent" does not include actions resulting from inadequate planning.

Validation - The determination that a stated telecommunications requirement has been evaluated and found to be justified on the basis of need for fulfillment of an assigned mission, task or function. Validation does not constitute direction to fulfill the requirement; it is added authority for programming, budgeting, and implementation when resources become available.

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NON-APPLICABILITY

This instruction does not apply to the submission and processing of telecommunications operating requirements in the following categories, except as required by reference (b):

- a. Administrative telephone facilities and services.
- b. Portable communications (base and tactical), and communications covered by the provisions of OPNAVINST 2300.45.
- c. Radio frequency assignments (OPNAVINST 2400.7).
- d. Cryptologic support for personnel and resources of COMSEC monitoring elements covered by the provisions of OPNAVINST S2501.10A.
- e. Special Intelligence communications terminal and relay resources, covered by the provisions of OPNAVINST C2561.3.
- f. Federal Telecommunications System (FTS) service, obtained in accordance with NAVTELCOMINST 2300.17A.
- g. AUTOVON Private Automatic Branch Exchange or Central Exchange access (OPNAVINST 2305.13A). Requirements for fourwire AUTOVON subscriber access lines terminated at a telephone subset are covered by this instruction.
- h. Office facsimile equipment covered by the provisions of SECNAVINST 10460.10. However, all inter-connecting communications other than telephone and tactical facsimile requirements are covered by this instruction.
- i. Other exclusions from the NTS are specified in enclosure (2) to OPNAVINST 5450.184C.

Enclosure (2)

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POLICY

1. General. Naval Telecommunications System requirements will be processed in accordance with this instruction.

a. Major Telecommunications Requirements, or other requirements as directed, which utilize the resources of or otherwise impact on the telecommunications systems, networks, or facilities within the area or jurisdiction of a commander of a unified or specified command will be coordinated with the commander concerned in accordance with reference (b). This coordination will be accomplished by the submitting authority prior to forwarding requirements as prescribed in this instruction.

b. Telecommunications requirements must be identified and costs estimated as early as possible in the planning and programming cycle and with the same completeness as the system requiring telecommunications support. Telecommunications required to support a weapons system, automated data system, command and control system, intelligence, logistics or administrative system must be specifically identified as an integral part of such system.

c. Telecommunications requirements in support of RDT&E will be submitted in accordance with this instruction. Programming and budgeting input is the responsibility of the submitting authority or project sponsor or manager.

d. Non-tactical telecommunications requirements normally will be satisfied using existing or planned DCS switching and transmission facilities. Dedicated facilities will be provided only when the DCS cannot provide the technical or critical operational capability required, or when dedicated facilities provide obvious cost advantages.

e. Future telecommunications requirements identified and documented by submission in accordance with enclosure (5), and not previously programmed and budgeted will be programmed and budgeted by the command with the O&M responsibility. At budget review time, monies programmed for leased NTS requirements will be transferred to COMNAVTELCOM to preclude extensive accounting and transfers of funds. Separate Marine Corps funding precludes wholesale

Enclosure (3)

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transfer of funds at budget review time and will continue to require the periodic transfer of funds. COMNAVTELCOM will program and budget all Navy validated access lines and Communication Service Industrial Fund (SIF) (backbone) costs for DCS switched networks. A requirement for DCS switched service with a desired operational date less than 24 months into the future, will be processed as an urgent operational requirement and must be fully justified and funds provided for a minimum of two years by the submitting authority. Future TELCORS, as described in NAVTELCOMINST 2800.1, will be provided routinely to submitting authorities and requiring activities. Validated requirements no longer needed must be identified for cancellation by the requiring activity or submitting authority. Requirements not validated or approved will be returned under separate cover to the submitting authority with the reasons for non-validation or disapproval.

f. Transfer of claimancy for consolidated naval telecommunications centers to COMNAVTELCOM is limited to those sites which are collocated with an existing COMNAVTELCOM managed activity.

g. Issues which cannot be resolved between submitting authorities and COMNAVTELCOM will be referred to CNO.

2. Dedicated Circuits.

a. Use will be restricted to requirements which cannot be satisfied by any other means.

b. A requirement, to qualify for dedicated service, must meet the test of one of the following criteria:

(1) Essential Characteristics

(a) Operational requirement (example: high-speed/interactive data requirements that cannot be adapted due to common user system data message length limitations or formal restrictions).

(b) Serviceability (example: equipment essential to satisfying the requirement is incompatible with common user switched networks).

(c) Responsiveness (example: realtime need for

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the exchange of data requiring direct connectivity at all times).

(d) Other pertinent technical or qualitative factors (example: lack of ready access to a switched network because the remote location of the subscriber results in excessive circuit mileage costs).

(2) Cost. To qualify solely on the basis of cost, dedicated service must be significantly less costly than the use of:

- (a) DCS Facilities
 - AUTODIN
 - AUTOVON
 - AUTOSEVOCOM
- (b) Other Government Systems
 - Federal Telecommunications System (FTS)
 - Advanced Record System (ARS)
- (c) Foreign/or Treaty Organization Systems
- (d) Commercial
 - Wide Area Telecommunications Service (WATS)
 - Direct Distance Dial (DDD)

(3) Costing of DCS facilities for cost comparison purposes will be based on access line charges and will not include backbone costs. Costs for other leased services will be the prevailing costs or tariffs. Include in the plan the cost figures used.

e. A requirement that qualifies for dedicated service, will be satisfied by the most economical transmission system.

f. A primary or secondary backup requirement will share use of other existing facilities wherever possible.

g. Consolidation of dedicated facilities for shared use by similar activities will be accomplished whenever feasible.

h. Low volume, full period circuits will be replaced by dial-up circuits whenever appropriate.

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i. Biennial Review of Dedicated Networks and Circuits.

(1) COMNAVTELCOM, in coordination with the submitting authority, will review dedicated networks and circuits every two years and determine whether such networks and circuits will be continued, or if the requirements can be fulfilled through use of DCS common user networks.

(2) The biennial reviews will be based on data in facilities reports submitted in accordance with OPNAVINST 2010.3D and TELCOR documents.

3. Orderwire and Coordination Circuits.

a. Voice orderwires and voice coordination circuits external to a facility will be used only when operation of a covered teletype circuit is impractical at either or both terminals (e.g., contractor operated facilities with inadequate security).

b. As specified in OPNAVINST C5510.93B, local orderwires will be covered to the greatest extent practicable, or operated as approved wirelines. Approval authority is vested in the activity commanding officer.

c. DCA Circular 310-50-6 prescribes policy and procedures for DCS teletype and voice orderwires.

4. Electronic Courier Circuits (ECC)

All requirements for ECCs will be submitted in accordance with OPNAVINST 2300.42A.

5. Continuity of Operations

a. The normal method of assuring continuity of operations is dual homing, dual access, split homing, or diverse routing, and the assignment of an appropriate restoration priority by the National Communications System Manager.

b. Requirements for redundant (backup) telecommunications will be reviewed for validation on a case-by-case basis. To qualify the primary circuit must have a restoration priority level of one or two. Section IV of ACP 121 U.S. SUPP 1(E) and NWP-4 provide guidance regarding restora-

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tion priorities. Such requirements must be fully justified citing operational necessity and deficiencies which have been experienced or are anticipated with primary facilities.

(1) Within the continental U.S., Alaska, Puerto Rico, and Hawaii, redundant facilities will be limited to support of operating forces based ashore.

(2) In overseas areas the need for redundancy may be conditioned by the technical adequacy of host nation systems, governmental and labor instability, or the need to have specified telecommunications support wholly under control of U.S. Forces.

(3) Command and control or other mission activities requiring a higher level of survivability and reliability than that provided by a single system, must justify the requirement based upon the mission and location of the activity (the requested degree of communications survivability must be consistent with that of the operational facility being served).

6. Non-DOD U.S. Government Activities. Requests for telecommunications service with or in support of such activities will be forwarded to CNO via the submitting authority and COMNAVTELCOM.

7. Requirements Involving Non-U.S. Activities

a. Navy activities originating such requests will forward them to CNO via the submitting authority and COMNAVTELCOM. ACP 121 - US SUPP-1(E) provides guidance.

b. Normally, requests of this nature must be approved by the Joint Chiefs of Staff and the Secretary of Defense prior to validation.

8. Requirements Involving Service for DOD Contractor Activities

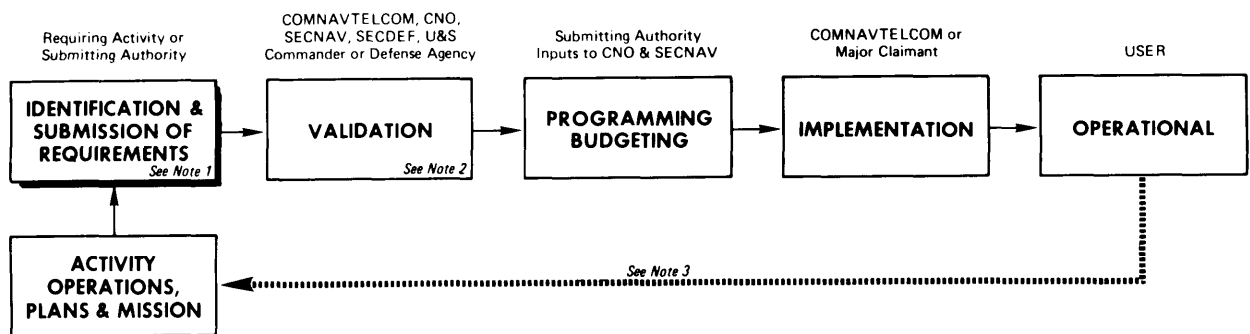
In all cases, such requests will be forwarded to CNO for action via the submitting authority and COMNAVTELCOM.

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THE TELECOMMUNICATIONS REQUIREMENTS PROCESS

1. The requirements process begins with the identification of telecommunication needs based upon the mission of the activity and the operational planning the activity must support (see Figure 4-1). The user (requiring activity) identifies its telecommunications support needs and forwards these requirements through the chain of command to the submitting authority.

Figure 4-1 The Telecommunications Requirements Process Flow Diagram

**Notes:**

1. Requirements may be originated at the operating level/command, or result from centralized planning by COMNAVTELCOM (e.g., AUTODIN, Comm. center consolidations) or CNO platform sponsors, who in turn task CHNAVMAT, SYSCOMS or COMNAVTELCOM.
2. To CNO/SECNAV/SECDEF for major or below-threshold telecommunications requirements.
3. Feedback causing new or changed requirements.

2. The submitting authority reviews and comments upon the requirements and forwards them to COMNAVTELCOM.

Enclosure (4)

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3. COMNAVTELCOM evaluates and validates minor telecommunications requirements and forwards below threshold and major telecommunications requirements to CNO with appropriate recommendations. Validation in itself does not provide funding or resources to support the requirement. It is a normal prerequisite to programming and budgeting actions.

4. Funding of validated telecommunications requirements occurs only after successful programming and budgeting actions. User requirements for which COMNAVTELCOM has O & M responsibility must be received by not later than 31 July annually in order to be validated, and included with the initial Program Objective Memorandum (POM) input to CNO. If the POM input survives the CNO review process, it is submitted to SECNAV, thence to SECDEF. (At this point the individual requirement may have lost its identity, having been included under a broader project or program title.) SECDEF approval of the SECNAV POM leads to budget formulation, separate budget and congressional approval approximately 27 months later. This lead time cycle applies also to those requirements forwarded by submitting authorities for inclusion in the POM.

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IDENTIFICATION AND SUBMISSION OF
FUTURE NAVAL TELECOMMUNICATIONS SYSTEM OPERATING
REQUIREMENTS BY THE REQUIRING ACTIVITY (R/A)

1. Identifying Requirements

a. The requiring activity (R/A) identifies its future telecommunications requirements from assigned mission, tasks and functions. This is the initial step in the requirements process. In some instances, submitting authorities, CMC, COMNAVTELCOM, CHNAVMAT, or a SYSCOM, may be centrally planning a system or project, in which case the requiring activity will receive feedback and be advised of action required. Table 5-1 of this enclosure, provides an aid in identifying and submitting requirements.

b. Various categories of requirements, which may be major, below threshold or minor, as defined in enclosure (1), are described below:

(1) New NTS requirements whether DCS or tactical, leased or government owned, and related COMSEC requirements.

(2) Routine actions affecting DCS services such as discontinuances, extensions, circuit reroutes, leased equipment relocations, alternate routing (except AUTODIN, which is submitted IAW DCA OPLAN 1-75), changes to operating hours, and data base changes.

(3) Fleet Portable Communications. Requirements are under the authority of the FLTCINCS. Refer to OPNAVINST C9570.2 for guidance. These requirements are not applicable to the NTS.

(4) Communications for Internal Security, Industrial Control and Passive Defense. OPNAVINST 2300.45 prescribes the procedures for satisfying these requirements. Commanders having primary support responsibility for operating forces based ashore and shore activities are authorized to approve and fund requirements for internal security, industrial control and emergency and passive defense. These requirements are not applicable to the NTS.

Enclosure (5)

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(5) Office Facsimile Transmission Service. SECNAVINST 10460.10 provides guidance in obtaining equipment for this type of office facsimile service. Interconnect requirements, satisfied by other than the administrative telephone systems, require processing in accordance with this instruction, e.g., dedicated lines or AUTODIN. Tactical facsimile requirements are a part of the NTS and are covered by this instruction.

(6) Communications Support Provided to the Navy by other DOD activities (e.g., Army or Air Force). Requirements of this type normally are identified and funded at the local level. Message service and administrative telephone support are generally the types of requirements that are satisfied. Responsibilities and funding are covered by a locally prepared interservice support agreement or similar document. SECNAVINST 7020.4C provides guidance regarding financial administration of interdepartmental support agreements with the Army and Air Force.

(7) FTS and ARS. These services are managed by the General Services Administration, and provide government-wide service similar to AUTOVON and AUTODIN. Within the Navy, use of FTS and ARS is normally limited to activities not located on military installations. FTS service is obtained in accordance with COMNAVTELCOMINST 2300.17A. Requests for ARS service will be submitted to COMNAVTELCOM.

(8) Armed Forces Radio and Television Service (AFRTS). SECNAVINST 1700.10B provides guidance. This instruction is applicable only to assistance in obtaining transmission circuits.

(9) Banking Facilities Serving Navy and Marine Corps Installations. SECNAVINST 5381.1F authorizes communications support to banking facilities and provides guidance for providing such service.

(10) Communications Support of Morale, Welfare and Recreation Programs and Activities. DOD Directive 1330.2 of 17 March 78 contains authorization and funding guidance for providing communications support to morale, welfare and recreation activities.

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(11) Communications Security Requirements. The following is a listing of points to consider in establishing COMSEC system and equipment requirements. OPNAVINST C5510.93B provides guidance on control of compromising emanations.

(a) General Descriptive Data

- 1 Type and format of information
- 2 Highest classification of information
- 3 Special category information
- 4 Perishability of information
- 5 Netting requirements in terms of broadcast, point-to-point, multiholder or conferencing.

(b) Transmission Security

- 1 Requirement for internal plain text electrical transmission circuits.
- 2 Authentication requirements
- 3 Clearance and access levels of all system subscribers
- 4 Any special protective measures required to protect the transmission from exploitation

(c) COMSEC Equipment Requirements

- 1 Type, nomenclature, quantity and availability of COMSEC equipment
- 2 Speed of information transfer and type of operation (manual or automatic, on-line or off-line)

(d) Physical Security

- 1 Physical environments in which system will be installed (friendly or hostile, aircraft, private residences, offices, communication centers, unmanned sites, as examples)

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2 Physical protective measures required for each type of environment

3 Protective measures required against forceful or surreptitious entry, and clandestine listening/recording devices at terminal locations

4 Special protective measures (e.g., physical, accounting, personnel authorization) required for classified crypto material.

(e) Emission Security

1 Evaluate possible problem areas, based on factors such as physical location, type of equipment (including terminal electronic subsystems), amount and type of classified information processed.

2 Determine applicable TEMPEST guidance documents, and sources of technical assistance in avoiding TEMPEST problem.

(f) Use of COMSEC material by U.S. contractors is covered in OPNAVINST 2221.5.

c. Special Considerations

(1) Requirements for four-wire access lines terminated at an AUTOVON subscriber subset or narrowband AUTOSEV-OCOM terminal must be approved by the area unified commander, or CNO for CONUS support activities, and comply with Section XII, ACP 121 U.S. SUPP-1(E).

(2) AUTODIN I store and forward message switching in addition to providing general message and card transmission, also is capable of providing the services described below, which must be considered as alternatives to dedicated service:

(a) Query/Response - Service designed primarily to satisfy remote job entry requirements. This service allows terminals and host to use an abbreviated header format for information exchange via AUTODIN I ASCs. DCAC 310-D70-60 refers.

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(b) Guaranteed Sequential Delivery of Bulk Data - Within the CONUS only, this service provides bulk transmission of data to a single destination regardless of the number of segments to a message. A query/response capability must be available at the host system to initiate the connection to the switching environment.

(c) Facsimile - Provides terminal-to-terminal transmission of facsimile data via AUTODIN ASCs, requires special terminal equipment and minimum transmission rate of 1200 bits per second (BPS) with 2400 BPS preferred. With appropriate interface, facsimile equipment can share an existing access line with an AUTODIN Mode I terminal.

(3) ARPANET - A packet-switched, telecommunications network originally designed to service the scientific community in support of DOD research and development. The network is managed by DCA, and is limited to the CONUS and Hawaii. It provides computer to computer and terminal to computer data service, similar to AUTODIN II, as contrasted with record communications.

2. Submitting Requirements

a. Major and below-threshold telecommunications requirements are prepared and forwarded via the submitting authority and COMNAVTELCOM in accordance with reference (b). The vehicle for the submission of such requirements is a Subsystem Project Plan (SPP). In addition, requirements data forms will be enclosed for each recommended circuit as prescribed in Table 5-2 of this enclosure. An SPP may be submitted at any time, but it is necessary to allow time for review and approval to be completed at all levels at least 60 days prior to the annual POM input to the consolidated telecommunications program.

b. Minor telecommunications requirements are prepared and submitted via the submitting authority to COMNAVTELCOM. Requirements data forms will be enclosed for each proposed circuit as outlined in Table 5-2 of this enclosure. To insure understanding of the requirement, the forwarding letter or statement with the requirements forms will provide: the anticipated traffic volume or use; the highest security classification of information to be transferred; feasibility or urgency of the information; an explanation for dedicated service (i.e., reason DCS switched networks cannot be used), if applicable; a description of any peculiar

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iar site or system features. Minor requirements may be submitted at any time. A communications plan may be required of the requiring activity or submitting authority in situations involving numerous activities or locations, new concepts, or a large number of circuits.

c. Urgent telecommunications requirements are submitted via the submitting authority as the need arises. Message submissions must include the essential information required in the requirements data forms (Table 5-2). Letter submissions will have the requirements data forms enclosed. The submitting authority must identify funds, or an equivalent trade-off, for leased costs and any industrial fund charges. The availability of other required resources (equipment and personnel) must also be indicated.

d. Requirements that are temporary or in support of exercises will be submitted in accordance with enclosure (7) for immediate implementation, if funded. Unfunded requirements will be submitted as urgent telecommunications requirements.

e. Telecommunications requirements in support of ADP reflect the largest growth and cost in telecommunications support. Until implementation of AUTODIN II packet switching, the only practical means of satisfying ADP interconnect requirements are dedicated lines or dial-up telephone lines conditioned for data transmission.

(1) Guidance for the submission of ADP requirements is provided in Appendix 1 to this enclosure.

(2) Government furnished, on-base or intrasite connections and telephone dial-up service to the government exchange are obtained locally.

f. Requests for new or replacement government equipment needed to support telecommunications requirements validated under this instruction will be forwarded in accordance with enclosure (7). Such requests will reference correspondence approving or validating the basic requirement. Exceptions are centrally managed projects or planning that have been assigned to COMNAVTELCOM or COMNAV-ELEXSYSCOM.

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g. To determine total resource requirements, the requiring activity, submitting authority or higher headquarters may fund and request a site survey and a preliminary BESEP be provided by COMNAVELEXSYSCOM. OPNAVINST 1000.16 provides guidance on manpower.

CODING INSTRUCTIONS FOR REQUIREMENTS DATA FORMS

FORM ONE (TABLE 5-2)

- | FIELD (AND COLUMNS) | DATA ENTRY |
|---------------------|---|
| 1. (Column 1-2) | Submitting Authority (S/A) code. Enter appropriate code from Table 6-1 of enclosure (6). |
| 2. (Column 4-6) | Item number. Numerical sequence of item submitted for current fiscal year. S/A assign and enter. Start new series beginning each fiscal year. |
| 3. (Column 8-14) | Validation number. Do not enter. COMNAV-TELCOM provides. Column 8 will be "T" for CNTC validation or "C" for CNO validation. The validation number (column 9-11) will be sequential for the current fiscal year (column 13-14). |
| 4. (Column 16-23) | Geographic point "from." Enter this and fields 5, 6, and 7 in accordance with DCAC 310-65-1. This is the user location, normally identified by the R/A. |
| 5. (Column 25-26) | State or country "from" point. |
| 6. (Column 28-35) | Geographic point "to." |
| 7. (Column 37-38) | State or country of "to" point. |
| 8. (Column 40-43) | Required operational date. R/A assign. Column 40 is the numerical quarter. Enter "Q" in column 41. In columns 42 and 43 indicate last two digits of the fiscal year. |
| 9. (Column 45-49) | Type of service. R/A assign general type of service required from the following: CARD (DATA), TAPE (DATA), COMP (direct computer access), VOICE, TTY (teletype), FAX (facsimile), OTHER. If |

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"other" is used, it is to be explained in the narrative remarks card.

10. (Column 51-54) Type of operation. R/A assign general type of operation required from the following: FDUX (full duplex), HDUX (half duplex), R/O (receive only), S/O (send only), MUXD (multiplexed data full duplex), MUXV (multiplexed voice full duplex), OTHR (other). The latter is to be explained in the narrative remarks card.
11. (Column 56-60) Modulation or data rate. R/A assign rate required, right justified. Columns 59 and 60 are used for B (baud/bits), KB (kilobits), or MB (megabits). Examples: 75B, 2.4KB, 16KB, 2MB. The entry "AV" is used for analog voice.
12. (Column 62-66) Crypto. R/A enter crypto equipment desired to be used in columns 62-65. In column 66 enter crypto equipment availability: "A" means available, "R" means required.
13. (Column 68-73) Priority. R/A assign. This will provide the relative priority of the line item requirement in relation to other requirements. This data entry is obtained from the Force Activity Designator (FAD) delineated by OPNAVINST 4614.1. The first three columns (68-70) will be used for the FAD addressed by the above instruction. Column 71 is a hyphen. The last two columns (72-73) will be the Urgency of Need Designator (UND). Assignment is to be based on Table (1) "Criteria for Use by All," of Enclosure (2) to OPNAVINST 4614.1. This code will be used to indicate the relative urgency of the requirement for use in programming/budgeting.
14. (Column 75-80) Annual Recurring Leased Costs. R/A or S/A enter estimated costs for recurring leased services when S/A is responsible for funding. Enter in thousands of dollars with nearest 100 preceded by a decimal, e.g., \$102,300 per annum would be entered 102.3, right justified.

- NOTE -

Columns 3, 7, 15, 24, 27, 36, 39, 44, 50, 55, 61, 67, and 74 are reserved for computer control purposes and are not to be used.

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FORMS 2 THROUGH 4 (TABLE 5-2)

Entries in fields 1 through 3 are common and will be completed on remarks form number 2 (plus form 3 and 4 if used) as outlined for form number 1. The entry of an asterisk (*) in column 15 of each remarks form is required. The remaining columns (16-80) are free flowing narrative remarks information identical for forms 2 through 4.

The first entries in form 2 (starting with column 16) will be the identification of the requiring activity and the corresponding UIC for the activity in accordance with Navy Comptroller Manual, Vol. 2 (chapter 5). Abbreviations or acronyms are acceptable only if they are common knowledge. The following information at a minimum is desired in the remarks column: approved plan, project or tasking being supported (cite authority and reference); state if additional manpower (quantity) and training required; state if E&I funds are available or programmed; indicate whether government furnished equipment is available or must be procured or leased; justification for the service and the impact if requested service is not provided.

Table 5-1 GUIDE TO IDENTIFYING & SUBMITTING REQUIREMENTS

TYPE OF SERVICE	WHO SUBMITS	WHO		WHO FUNDS	HOW OBTAINED	SPECIAL CONSIDERATIONS (See Notes 2 and 3)	REFERENCES
		APPROVES	VALIDATES (See Note 1)				
A. General Category							
1. Admin. Telephone Facilities and Services	R/A or PWC	S/A	COMNAVFAENGCOM	S/A or NAVFAENGCOM	IAW NAVFACINSTS	Copies of requests for leased lines or WATS for ADP support will be provided to NAVTELCOM and NAVDAC	NAVMATINST 2305.5B NAVFACINST 2300.2B
2. Below-threshold Telecommunications Requirements	R/A or S/A	S/A	CNO	S/A	SPP		SECNAVINST 11120.1D
3. Major Telecommunications Requirement	R/A or S/A	S/A SECDEF	CNO	S/A	SPP		SECNAVINST 11120.1D
4. Minor Telecommunications Requirement	R/A	S/A	COMNAVTELCOM	S/A	IAW Enclosure (5)	SPP required in some cases	
5. Routine DCS Action	R/A	Navy TCO (COMNAVTELCOM) or Area TCO (CINCPACFLT or CINCUSNAVEUR)	N/A	N/A	RFS (Feeder TSR) IAW Enclosure (7)		DCA Circular 310-130-1 NAVTELCOMINST 2880.1
6. Urgent Telecommunications Requirements	R/A	S/A	COMNAVTELCOM		IAW Enclosure (5)		NAVTELCOMINST 2880.1

NOTES:

1. Unified (Area) Commanders and Defense Agencies may also validate requirements.
2. Use of government furnished equipment in conjunction with foreign leases normally requires host nation approval of such equipment before leases can be consummated.
3. Circuit requirements with demanding technical parameters necessitate determination that domestic and foreign carrier transmission facilities as well as on-base cable or other facilities are adequate in number and quality to meet operational dates.

Table 5-1 (cont.) GUIDE TO IDENTIFYING & SUBMITTING REQUIREMENTS

TYPE OF SERVICE	WHO SUBMITS	WHO		WHO FUNDS	HOW OBTAINED	SPECIAL CONSIDERATIONS (See Notes 2 and 3)	REFERENCES
		APPROVES	VALIDATES (See Note 1)				
B. Specific Category							
1. ADP Interconnects (other than AUTODIN II)	R/A	S/A COMNAVJAC	CNO or COMNAVTELCOM C2 Area Commander and JCS in some instances.	S/A	IAW Enclosure (5) or references	May be centrally planned. Area dial-up and on-base lines are obtained locally. SPP may be required. See AUTODIN II.	OPNAVINST 5231.1 SECNAVINST 5236.1 and 5236.3, and JCS Pub. 19.
2. AFRTS Support	R/A	Navy Broadcast Service	Navy Broadcast Service or PA	S/A(PA)	RFS (Feeder TSR)		SECNAVINST 1700.10B
3. ARPANET	R/A	S/A DCA	COMNAVTELCOM	S/A	IAW Enclosure (5)	Unclassified Info only	
4. Approved Wirelines	R/A	Commanding Officer	N/A	N/A	Locally provided		
5. ARSIGSA	R/A	S/A	COMNAVTELCOM	S/A	Request to COMNAVTELCOM	Navy use very limited	OPNAVINST C5510.93B
6. AUTODIN I	R/A	S/A	COMNAVTELCOM	COMNAVTELCOM	IAW Enclosure (5) and Section IV, AUTODIN I Terminal Plan (current year)		Navy AUTODIN I Terminal Plan (current year)
7. AUTODIN II	R/A or S/A	S/A	COMNAVTELCOM	COMNAVTELCOM	IAW Enclosure (5)	Provide NAVDAC w/info copy of request.	DCA Pamphlet-AUTODIN II User Reqs Data Base Format and Instructions, Sep 1978
8. AUTOSEVOCOM	R/A	S/A	CNO or Area Commander	COMNAVTELCOM	IAW Enclosure (5)	Trade-off required for AUTOSEVOCOM I	ACP 121 U.S. SUPP 1(E)
9. AUTOVON	R/A	S/A	CNO or COMNAVTELCOM	COMNAVTELCOM	IAW Enclosure (5) and OPNAVINST 2305.13A	Area Commander approval may be	ACP 121 U.S. SUPP 1(E), OPNAVINST 2305.13A, DCA Circular 310-V175-2 and 370-V175-6
10. Banking Facilities Communications Support	R/A (Host command)	S/A	COMNAVTELCOM	Banking Activity	IAW Enclosure (5)		SECNAVINST 5381.1F
11. Communications Support provided by Non-Navy Activities	R/A (Usually a tenant activity)	Host Activity	N/A	S/A	Local Support Agreement	Support requests other than local are forwarded to S/A	SECNAVINST 7020.4C (For Army and AF support)
12. COMSEC - General	R/A	S/A	CNO or COMNAVTELCOM	Equipment COMNAVSECGRU	IAW Enclosure (5) and (7)	COMSEC includes many categories of need. This item is for equipment. See references.	OPNAVINSTS C5510.93 B and 2221.5

NOTES:

1. Unified (Area) Commanders and Defense Agencies may also validate requirements.
2. Use of government furnished equipment in conjunction with foreign leases normally requires host nation approval of such equipment before leases can be consummated.
3. Circuit requirements with demanding technical parameters necessitate determination that domestic and foreign carrier transmission facilities as well as on-base cable or other facilities are adequate in number and quality to meet operational dates.

Table 5-1 (cont.) GUIDE TO IDENTIFYING & SUBMITTING REQUIREMENTS

TYPE OF SERVICE	WHO SUBMITS	WHO		WHO FUNDS	HOW OBTAINED	SPECIAL CONSIDERATIONS (See Notes 2 and 3)	REFERENCES
		APPROVES	VALIDATES (See Note 1)				
B. Specific Category (cont.)							
13. Coordination Circuits	R/A or S/A	COMNAVTELCOM or Area TCO	N/A	S/A	RFS (Feeder TSR) IAW Enclosure (5)	See Orderwires	DCA Circular 310-130-1
14. Developmental Inquiry (Leased Services)	R/A	S/A	COMNAVTELCOM	S/A	IAW Enclosures (3) and (5)	Normally used to determine feasibility and costs of possible leased services.	
15. Electronic Courier Circuit	R/A	S/A	CNO has issued stand-by validation	S/A or COMNAVTELCOM	RFS (Feeder TSR) IAW Enclosure (7)	Cite TRN 189-E-174 in Item 417 of RFS	DCA Circular 310-130-1
16. Exercise/Temporary Communications	R/A	S/A	COMNAVTELCOM	COMNAVTELCOM	Request to COMNAVTELCOM	Navy use is limited	NAVTELCOMINST 2300.17A
17. FTS (GSA)	R/A	S/A	S/A	S/A	Equipment Allowance List		OPNAVINST 2300.45
18. Internal Security Industrial Control and Passive Defense	R/A	S/A	S/A or other depending upon facilities used	R/A or S/A	Request to S/A		DoD Directive 1330.2
19. Morale, Welfare and Recreation Communications Support	R/A	S/A	N/A	S/A	IAW Enclosure (7) MILSTRIP	May be centrally planned	OPNAVINST 11010.20, NAVELEXINSTS 4440.63 and 11010.4, NAVSUP Pub. 437.
20. New Equipment	R/A	S/A	COMNAVTELCOM if other than Admin, Telephone System used.	S/A	IAW Enclosure (5)		SECNAVINST 10460.10
21. Office Facsimile Transmission Equipment Interconnects	R/A	Commanding Officer	N/A	R/A	Locally provided See Enclosure (3)	TTY preferred over voice. TTY normally crypto covered or approved wire-line.	OPNAVINST C5510.938
22. Orderwires (Local)	R/A	S/A or DCA	COMNAVTELCOM or DCA	S/A	IAW Enclosures (3) and (5)	TTY preferred over voice. TTY requires crypto cover, normally.	OPNAVINST C5510.938 DCA Circular 310-50-6

NOTES:

1. Unified (Area) Commanders and Defense Agencies may also validate requirements.
2. Use of government furnished equipment with foreign leases normally requires host nation approval of such equipment before leases can be consummated.
3. Circuit requirements with demanding technical parameters necessitate determination that domestic and foreign carries transmission facilities as well as on-base cable or other facilities are adequate in number and quality to meet operational dates.

Table 5-1 (cont.) GUIDE TO IDENTIFYING & SUBMITTING REQUIREMENTS

TYPE OF SERVICE	WHO SUBMITS	WHO		WHO FUNDS	HOW OBTAINED	SPECIAL CONSIDERATIONS (See Notes 2 and 3)	REFERENCES
		APPROVES	VALIDATES (see Note 1)				
B. Specific Category (cont.)							
24. Prepositioned TSR	R/A	S/A	COMNAVTELCOM	S/A	IAW Enclosure (5) Request to S/A		DCA Circular 310-130-1
25. Portable Communications Equipment (Fleet)	R/A	S/A	N/A	S/A	Through Frequency Coordinator to NAVEMSCEN		ACP 190 U.S. SUPP-1 ANNEX J, NTF 6, OPNAVINST 2400.7D, NWP-4
26. Radio Frequencies	R/A	S/A and NAVEMSCEN	N/A	N/A			
27. Replacement Equipment (Gov't)	R/A or S/A	S/A	N/A	NAVELEXSYSCOM, NAVSUPSYSCOM, and in some instances, S/A	IAW Enclosure (7) MILSTRIP	May be centrally planned	OPNAVINST 11010.20, NAVELEXINSTS 4440.6B and 11010.4 and NAVSUP Pub. 437
28. Restoration Priorities	R/A. Area Commander, as required	S/A	DCS - (Mgr. NCS) Tactical - (FLTCLINC)	N/A	DCS, RFS IAW Enclosure (5) Tactical - Request to FLTCLINC		DCA Circular 310-130-1, OPNAVINST 2300.36, and NWP-4
29. Security Level Upgrade of Terminal	R/A	S/A and COMNAVTELCOM	N/A	N/A	RFS IAW Enclosure (5)		ACP 121 U.S. SUPP-1(E), NTP-4 and OPNAVINST C5510.938
30. Tactical	R/A or S/A	S/A. Area Commander, if required	CNO or COMNAVTELCOM. In some cases JCS	S/A, COMNAVTELCOM OTHER	IAW Enclosure (5) Major request via OR route to platform sponsor	May be centrally planned	OPNAVINST 9410.1
31. Temporary						See Exercise	

NOTES:

1. Unified (Area) Commanders and Defense Agencies may also validate requirements.
2. Use of government furnished equipment in conjunction with foreign leases normally requires host nation approval of such equipment before the lease can be consummated.
3. Circuit requirements with demanding technical parameters necessitate determination that domestic and foreign carrier transmission facilities as well as on-base cable or other facilities are adequate in number and quality to meet operational dates.

Table 5-2 Requirements Data Form

		FIELD													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		ITEM NO.	VALIDATION NUMBER	GEOGRAPHIC POINT FROM	STATE CTRY	GEOGRAPHIC POINT TO	STATE CTRY	REQ OP DATE	TYPE SERV	TYPE OPER	MOD/DATA RATE	CRYPTO	PRIORITY	ANNUAL RECUR LEASED COSTS	
FORM	1	AE 123	T654-81	LONDON	UK	NORFOLK	51	3Q87	COMP	FDUX	2.4KB	KG36R	II-Ø5	38.4	
	2	AE 123	T654-81	CINCUSNAVEUR	UICØØØ61	ASWCCS	C2	OPNAV	X78	NO ADDED MANPOWER OR					
	3	AE 123	T654-81	TRAINING REQ	GFE	WILL BE IN PLACE	RAPID TRANS	VITAL	ASW DATA TO						
	4	AE 123	T654-81	OP FORCES	IMPOSSIBLE	WITHOUT	SAT TX	PREFERRED							

SAMPLE

CODE WITH BLOCK LETTERING
To distinguish between similar Alpha/Numeric characters
use the following:

1Ø2 = NUMBERS 1ØZ = LETTERS

- FORM 10
1. PRIMARY FORM CONTAINING ESSENTIAL INFORMATION FOR IDENTIFICATION, SORTING, AND COMPUTING REQUIREMENTS DATA.
 2. FREE FLOWING UNFORMATTED FORMS FOR AMPLIFYING INFORMATION AND REMARKS. FIELDS 1
 3. 2 AND 3 ARE REQUIRED FOR IDENTIFICATION AND CONTROL AND MUST BE ENTERED ON ALL
 4. THREE FORMS. ACTIVITY AND UNIT IDENTIFICATION CODE REQUIRED ON FORM 2.

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APPENDIX 1 TO ENCLOSURE 5

GUIDE FOR SUBMITTING TELECOMMUNICATIONS REQUIREMENTS
IN SUPPORT OF ADP

1. Objective. To ensure that telecommunications system planning, programming and budgeting to interconnect and support automated data system (ADS) planning and development are coordinated, timely and consistent with Federal, DOD and Navy policy.
2. Background. DOD Directive 5100.40, Subj: Responsibility for the Administration of the DOD Automatic Data Processing (ADP) Program assigns responsibility for the ADP program. The DOD Directive requires the Secretaries of the Military Departments to designate a senior ADP policy official to administer the DOD ADP Program within the organizational elements under their respective jurisdictions. The Assistant Secretary of the Navy (Financial Management) is the designated Senior ADP Policy Official for the Department of the Navy. One of his assigned responsibilities is: "Ensure that the telecommunications aspects of ADP systems are determined in conjunction with telecommunications elements of the DOD and fully incorporated in ADP systems' concepts and throughout systems' life cycle."
3. Scope. This guide applies to telecommunications services in support of ADP facilities or terminals requiring telecommunications interconnect services. Automated data systems embedded in telecommunications systems are covered by separate instructions.
4. Action.
 - a. Early identification of telecommunications requirements by major claimants permit programming and budgeting actions in concert with the normal programming and budgeting cycle.
 - b. COMNAVDAC and COMNAVTELCOM will conduct a joint review of future requirements in conjunction with the annual POM submissions (normally on or about mid-August).
 - c. Marine Corps commands/activities will continue to submit telecommunications requirements in support of ADP, to CMC in accordance with current Marine Corps directives.

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5. Procedure.

a. AUTODIN II. Upon implementation, AUTODIN II will be the means to satisfy communications interconnects for ADP facilities. Exceptions will require operational and/or cost justification to obtain validation for dedicated communications service.

b. ADP Instructions Applicability.

(1) OPNAVINST 5231.1, Subj: Procedures for the Management of Automated Data Systems (ADS) Development, implements SECNAVINST 5231.1, and contains the following policy: "The interdependence of ADP and telecommunications shall be recognized at the outset of ADP or telecommunications system planning and design efforts, and relevant future costs for ADP and associated telecommunications resources shall be identified and considered during the conceptual and programming phases of such systems."

(a) Telecommunications support and interface requirements will be defined by the requesting activity in coordination with COMNAVDAC and COMNAVTELCOM prior to the initiation of detailed design of ADP systems. This will be accomplished by the requiring activity preparing a Subsystem Project Plan (SPP) for major and below threshold telecommunications requirements, and forwarded with the ADS plan.

(b) Minor telecommunications requirements may be incorporated in an SPP or submitted individually. The information outlined in Appendix H of SECNAVINST 5236.1 will assist in defining the requirement.

(2) SECNAVINST 5236.3, Subject: Privacy, funding and other certifications required in procurement of automatic data processing (ADP) equipment and services, states in Section III(2): "Prior to procurement of ADP equipment or services involving data communications, a study should be made of the means by which a data transmission requirement can be satisfied in the most efficient and economical manner, including line, software, and equipment requirements and projected costs."

(a) Individual studies prepared under this instruction will be developed by the requiring activity in

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coordination with COMNAVDAC and COMNAVTELCOM. However, submission of an SPP or abbreviated communications plan will satisfy this requirement.

(b) SECNAVINST 5236.1, Subj: Specification, Selection, and Acquisition of Automated Data Processing Equipment (ADPE) outlines the communications requirements information needed to support an ADP facility.

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- b. Speed - baud rate, bits per second, line blocks or words per minute.
4. Type of information: e.g., command and control, intelligence, administrative, environmental, logistics.
5. Locations: Identify from and to geographic end points and locations.
6. Operational date: Identify by fiscal year and quarter desired.
7. Details of service:
 - a. Equipment required (whether leased or government furnished).
 - b. Site preparation or military construction involved including estimated date of completion.
8. Manpower and Training impact: Increase or decrease in manpower with identification of command whose billets or ceiling points are affected. Amount and type of training required.
9. Funding:
 - a. Leased costs.
 - b. Cost and source of funding for GFE (including E&I).
 - c. Any other investment costs with source of funding, e.g., construction or site preparation.
 - d. Savings realized including leased costs and GFE.
 - e. Trade-off.
10. Operational justification:
 - a. Mission, concept of operation, function, correlation with other approved operational needs.
 - b. Impact on activity or military operations if requirement is not fulfilled.

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c. Explain why existing or similar programs will not serve requirement.

d. If dedicated service, explain why the DCS switched networks are not acceptable.

e. Any other requirements which impact upon this request or are related to it.

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RESPONSIBILITIES AND IDENTIFICATION OF
SUBMITTING AUTHORITIES (S/A)

1. Submitting Authorities are identified in Table 6-1.
2. As prescribed by this instruction, the submitting authority will review, approve, or modify, and forward requirements for all activities for whom responsible. Reviews will be made to insure specifically that the provisions of enclosures (3) and (5) have been considered. To assist in this review:
 - a. Compare submission with the Requirements Checklist found in Table 6-2.
 - b. Insure that requirements data forms, Table 5-2, have been prepared accurately and an item number assigned.
 - c. Designate a point-of-contact who can provide additional information.

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TABLE 6-1 - IDENTIFICATION OF SUBMITTING AUTHORITIES

CODE	COMMAND
AE	- Commander in Chief U.S. Naval Forces, Europe
AF	- Commander in Chief U.S. Atlantic Fleet
AR	- Commander, Naval Air Systems Command
CM	- Comptroller of the Navy
CN	- Chief of Naval Operations
CP	- Commander, Naval Civilian Personnel Command
CR	- Chief of Naval Reserve
DC	- Commander, Naval Data Automation Command
EL	- Commander, Naval Electronic Systems Command
FE	- Commander, Naval Facilities Engineering Command
MC	- Commandant, Marine Corps
MS	- Chief, Bureau of Medicine and Surgery
NC	- Commander, Naval Telecommunications Command
NI	- Commander, Naval Intelligence Command
NL	- Director of Naval Laboratories
NM	- Chief of Naval Material
NR	- Chief of Naval Research
NS	- Commander, Naval Security Group
NT	- Chief of Naval Education and Training
OC	- Oceanographer of the Navy
PA	- Chief of Office of Information
PF	- Commander in Chief U.S. Pacific Fleet
PR	- Commander, Naval Military Personnel Command
SC	- Commander, Military Sealift Command
SE	- Commander, Naval Sea Systems Command
SP	- Director of Strategic Systems Project Office (AM-1)
SU	- Commander, Naval Supply Systems Command

TABLE 6-2 REQUIREMENTS CHECKLIST

1. Type of action required (new start or major change).
2. Nature of requirement. DCS switched system, Navy tactical or other non-DCS service. Identify specifically.
3. Type of service:
 - a. Form - data, printed copy, voice, graphics.

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IMPLEMENTATION OF VALIDATED
TELECOMMUNICATIONS OPERATING REQUIREMENTS

1. General.

a. Implementation is the final step in the requirements process leading to an operational capability.

b. Prior to this step, all required resources have been programmed and budgeted or provided for in some other manner. All or part of the following resources may be needed for a particular requirement depending upon its scope:

(1) Military construction (major or minor)

(2) Equipment development and procurement

(3) Operation and maintenance (equipment installation, site preparation, installing equipment, leased services, communications industrial funding, manpower and training).

c. NTS requirements both DCS and tactical may be satisfied by either government furnished or leased services, or a combination of both. Tactical primary facilities are usually government furnished, but may be extended over leased facilities.

d. Normal leadtimes required by DCA to implement services are: overseas - 120 days; CONUS - 60 days. Table 11 of DCA Circular 310-130-1 provides leadtime information for various types of TSR actions.

e. Table 7-1 provides normal implementation milestones.

2. Government Furnished Equipment.

a. The BESEP is the normal vehicle for translating validated operating requirements into a documented statement of resource requirements. It is prepared by NAVELEXSYSCOM Field Technical Authorities in concert with NAVFACENGCOM Engineering Field Divisions. NAVELEXINSTS 10550.4 and 11000.1 refer. The BESEP is prepared in

Enclosure (7)

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response to planning of the requiring activity. In some instances, COMNAVELEXSYSCOM may prepare a BESEP as a result of tasking by higher authority or centralized planning, in which case the requiring activity and submitting authority will coordinate.

b. Equipment that is on hand to meet requirements must be identified to COMNAVELEXSYSCOM to insure that only necessary procurement actions are undertaken. Reports submitted under OPNAVINST 2010.3D will be of assistance.

c. New or replacement equipment not requiring a BESEP.

(1) Items under COMNAVELEXSYSCOM management are requisitioned in accordance with NAVELEXINST 4440.6B.

(2) Ship Parts Control Center managed items are obtained in accordance with NAVSUP PUB-437 and MILSTRIP procedures.

d. Publication CMS-4J prescribes procedures for obtaining cryptographic equipment.

e. With prior authorization, station forces may install equipment to meet requirements when it is within their capability.

f. To complete implementation, when DCS transmission or switched network facilities are utilized, the requiring activity submits a RFS (Feeder TSR) in accordance with NAVTELCOMINST 2880.1) (Note that the validation number is cited in part 417).

3. Leased Services.

a. Implementation of new validated requirements by leased services is accomplished by the requiring activity submitting a RFS (Feeder TSR) to the Navy TCO (COMNAVTELCOM) as prescribed in NAVTELCOMINST 2880.1 for action by DECCO.

b. The Navy TCO issues TSRs to implement two types of requests:

(1) Navy requirements for the DCS, which have been validated by COMNAVTELCOM, CNO or other authority.

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(2) Requirements validated by COMNAVFACENGCOM for service other than administrative telephone line where a lease by DECCO will provide the least cost service to the Navy.

c. Activities in foreign countries submitting a RFS must consider two points which may increase the leadtime in obtaining service:

(1) Possibility that host nation approval may be required for initial introduction of government furnished equipment that will be connected to the line, e.g., MODEMS or terminal equipment.

(2) The need for prior coordination with host nation or treaty forces when long leased lines are routed over their military facilities.

4. Implementation of routine DCS actions is accomplished by the requiring activity submitting a RFS (Feeder TSR) to the Navy or Area TCO as outlined in NAVTELCOMINST 2880.1. Routine DCS actions include:

- a. Disconnects/discontinuances
- b. Reroutes
- c. Upgrade in rate of service
- d. Changes to operating hours
- e. Terminal relocations

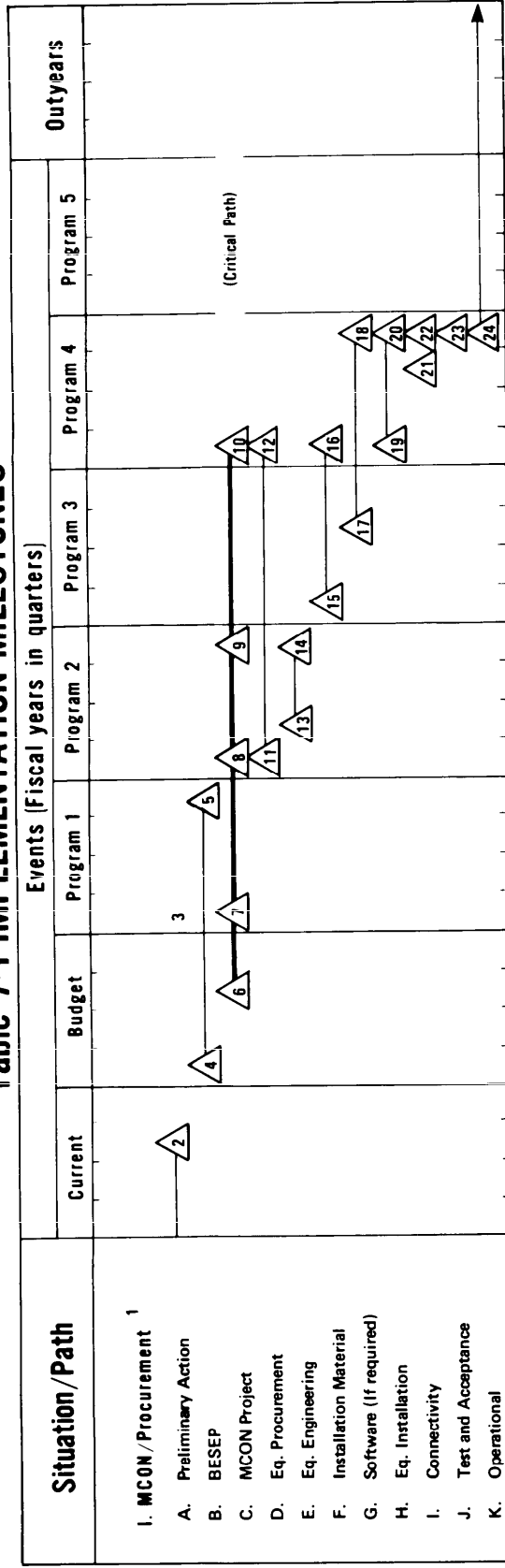
f. Alternate routing (By exception, note that AUTODIN alternate routes must be submitted in accordance with DCA OPLAN 1-75).

g. Data base changes

h. AFRTS funded service.

5. Exercise or temporary requirements (less than 12 months) are implemented by the requiring activity submitting a RFS (Feeder TSR) to the Navy TCO in accordance with NAVTELCOMINST 2880.1.

Table 7-1 IMPLEMENTATION MILESTONES



1. This situation requires major construction and communications equipment procurement.
2. The preliminary action event must be completed prior to subsequent events and requires at least 26 months lead time before implementation funds are available (identified in Program Year Two). Preliminary action includes: feasibility studies, engineering investigations, master planning, treaty or host nation approval, validation, and submission of the POM input, which is critical. The POM input must identify all resource requirements, including manpower and training. (See Tab A)
3. As the Program Years advance, and become the budget year, budgeted funds must be obligated by the end of that fiscal year. Contract award constitutes obligation. Multi-year procurement contracts are also possible.
4. Start BESEP preparation.
5. Final BESEP approved.
6. DoD MCON review.
7. Congressional military construction authorization.
8. MILCON funds available.
9. Award of contract and start construction phase.
10. Building beneficial occupancy date for equipment installation.
11. Procurement contract awarded. Pre-award contract development actions initiated 3 - 9 months prior to award.
12. Equipment delivered. In some instances, the contract may require the contractor to engineer, furnish and install (this would include events 13 - 20).
13. In conjunction with final BESEP, start equipment engineering for on-site installation. (*)
14. Complete equipment engineering. (*)
15. Start procurement action for minor bill of material items for equipment installation.
16. Complete procurement of installation material.
17. Start software development if required for automation equipment.
18. Complete software development.
19. Start equipment installation.
20. Complete equipment installation.
21. Initiate requests for circuits, if DCS or leased facilities are to be used.
22. Circuits installed.
23. Test and acceptance of communications facilities.
24. Facility operational.

(*) Resource allocation and effort could be delayed if equipment delivery is slipped.

Table 7-1 (cont.) IMPLEMENTATION MILESTONES

Situation/Path	Events (Fiscal years in quarters)							Outyears
	Current	Budget	Program 1	Program 2	Program 3	Program 4	Program 5	
II. Minor Construction or Site Prep/Procurement 1								
A. Preliminary Action	2							
B. BESEP		4	5					
C. Eq. Procurement			6	8	9	7		
D. Eq. Engineering					10	11		
E. Const/Site Prep					12	13		
F. Installation Material						14	15	
G. Software (If required)							16	
H. Eq. Installation							17	
I. Connectivity							18	
J. Tests and Acceptance							19	
K. Operational							20	
							21	

1. This situation requires minor construction or site preparation, and equipment procurement.

2. The preliminary action event must be completed prior to subsequent events and requires at least 26 months lead time before implementation funds are available (identified in Program Year Ywo). Preliminary action includes: feasibility studies, engineering investigations, master planning, treaty or host nation approval, validation, and submission of the POM input, which is critical. The POM input must identify all resource requirements, including manpower and training. (See Tab A)

3. As the Program Years advance, and become the budget year, budgeted funds must be obligated by the end of that fiscal year. Contract award constitutes obligation. Multi-year procurement contracts are also possible.

4. Start BESEP preparation.

5. Final BESEP approval.

6. Procurement contract awarded. Pre-award contract development actions initiated 3 - 9 months prior to award.

7. Equipment delivered. In some instances, the contract may require the contractor to engineer, furnish and install (this would include events 12 - 17).

8. In conjunction with the final BESEP, start equipment engineering for on-site installation. (*)

9. Complete equipment engineering. (*)

10. Develop and award construction or site preparation contract to start construction phase.

11. Building beneficial occupancy date for equipment installation.

12. Start procurement action for minor bill of material items for equipment installation.

13. Complete procurement of installation material.

14. Start software development if requires for automation equipment.

15. Complete software development.

16. Start equipment installation.

17. Complete equipment installation.

18. Initiate requests for circuits, if DCS or leased facilities are to be used.

19. Circuits installed.

20. Test and acceptance of communications facilities.

21. Facility operational.

(*) Resource allocation and effort could be delayed if equipment delivery is shipped.

Table 7-1 (cont.) IMPLEMENTATION MILESTONES

Situation/Path	Events (Fiscal year in quarters)						Outyears
	Current	Budget	Program 1	Program 2	Program 3	Program 4	Program 5
III. Negligible Site Prep/ Eq Available or Leased ¹	△ ₂						
A. Preliminary Action							
B. Eq. Engineering							
C. Site Prep.							
D. Eq. Installation							
E. Connectivity							
F. Test and Acceptance							
G. Operational							

1. Under this situation available government equipment with or without lease augmentation will be used. A BESEP is not required and on-site preparation costs are \$10,000 or less.
2. The preliminary action event must be completed prior to subsequent events and requires at least 26 months lead time before implementation funds are available (identified in Program Year Two). Preliminary action includes: feasibility studies, engineering investigations, master planning, treaty or host nation approval, validation, and submission of the POM input, which is critical. The POM input must identify all resource requirements, including manpower and training. (See Tab A)
3. As the Program Years advance, and become the budget year, budgeted funds must be obligated by the end of that fiscal year. Contract award constitutes obligation. Multi-year procurement contracts are also possible.
4. Start equipment engineering for on-site installation.
5. Complete equipment engineering.
6. Site preparation accomplished.
7. Equipment installed by station forces. If no GFE is used, leased services can result in an operational facility in the fiscal quarter funds are available.
8. Circuits requested.
9. Circuits installed.
10. Test and acceptance completed.
11. Operational.

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TAB A - TABLE 7-1 IMPLEMENTATION MILESTONES
SUGGESTED FORMAT FOR POM INPUT

CLASSIFICATION:

DATE:

SUBMITTING AUTHORITY:

PROJECT TITLE:

DESCRIPTION: (Describe the project, its objectives, activities that will benefit and other descriptive information)

JUSTIFICATION: (State the justification for the project, impact if not approved, provide reference to telecommunications requirement validation, and any other pertinent references; be prepared to forward copies of references).

Program Element: (If more than one P.E., resources must be identified separately for each P.E.)

Resources: (\$000/Mpwr in units)

Appropriation Lines: (Eliminate appropriation lines not required for your project).

	FY*	FY&	FY1	FY2	FY3	FY4	FY5
RDT&EN	(Provide shopping list for costs shown here. List by nomenclature/name, quantity, unit costs, name of activity receiving equipment/MCON. Ensure training facility is provided for unique equipment training prior to project installation.)						
MCON (R&D)							
OPN							
O&MN INSTALLATION (OF OPN)							
PMC							
O&MMC INSTALLATION (OF PMC)							
WPN							
O&MN INSTALLATION (OF WPN)							
APN							
O&MN INSTALLATION (OF APN)							
SCN							
O&MN INSTALLATION (OF SCN)							
TOTALS - RDT&E							
INVESTMENT							
O&M INSTALLATION							

Operating Resources: FY* FY& FY1 FY2 FY3 FY4 FY5

O&M,N or O&M,MC - (Identify as follows):

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Station Operation - Operating Costs (of telecommunications capability being acquired above).

Station Operation - Maintenance Costs (of telecommunications capability being acquired above).

Project Title: (repeated here for identification only; use on each project sheet).

FY* FY& FY1 FY2 FY3 FY4 FY5

Station Maintenance - Property Maintenance Costs (if any is required to support investment).

Station Costs - Other (specify, if any).

Headquarters Operation - Other (in support of the communications staff, if any).

Leased Telecommunications Costs (specify, if any).

Training Costs (specify, if any).

Other O&M (specify, if any).

TOTAL OPERATING (Less Pay).

Manpower: (Qty in units/salaries in \$000).

Officer	(N)	Qty	(In separate list, identify types of manpower required, to support quantity shown. For example, a quantity of 12 enlisted could be identified as follows: 9 RM, 3 ET).
		Cost	
Officer	(MC)	Qty	
		Cost	
Enlisted	(N)	Qty	
		Cost	
Enlisted	(MC)	Qty	
		Cost	
Civilian-DHUS		Qty	
		Cost	
DHFN		Qty	
		Cost	
IHFN		Qty	
		Cost	

TOTAL Manpower (in units)
(MilPay)
(CivPay)

* = current year

& = budget year

1-5 = program year